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Examiner: Andrew W. Wahba

In the Claims:

Please amend as follows:

1. (Currently Amended) A path transitioning data switch comprising:
a plurality of switching modules; and
a backplane interconnecting the switching modules
on a plurality of paths, said backplane comprising a multicast fabric and a unicast fabric,
wherein flow integrity of data units for a flow
undergoing path transition is maintained by temporarily disabling one or more of the switching
modules from transmitting the data units for the flow to the backplane and further wherein the
path transition is made from the multicast fabric to the unicast fabric upon source learning an
address of a network device that provides the flow.

2. (Original) The path transitioning data switch of claim 1 wherein the switching
modules are disabled from transmitting the data units for the flow when the path transition is
commenced, and are enabled after the path transition has been completed and an interval has
passed to ensure that all data units for the flow transmitted to the backplane prior to disabling the
switching modules have cleared the backplane.

3. (Canceled)

4. (Currently Amended) The path transitioning data switch of claim ~~3~~ 1 wherein all
switching modules are temporarily disabled from transmitting data units having the address
undergoing source learning as a destination address to the backplane.

5. (Original) The path transitioning data switch of claim 4 wherein the switching
module coupled to the network device whose address is undergoing source learning is

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temporarily disabled from transmitting data units having the address as a source address to the backplane.

6. (Original) The path transitioning data switch of claim 5 wherein the temporarily disabled switching modules are enabled to transmit to the backplane after source learning has been completed.

7. (Original) The path transitioning data switch of claim 6 wherein the temporarily disabled switching modules are enabled after an interval has passed to ensure that all data units having the source learned address as the source address or the destination address and transmitted to the multicast fabric have cleared the backplane.

8. (Original) The path transitioning data switch of claim 7 wherein said interval is predetermined.

9. (Currently Amended) A path transitioning data switch having a plurality of switching modules and a backplane interconnecting the switching modules on a plurality of paths, the data switch comprising:

means for transmitting a first data unit for a flow from a first switching module to a second switching module on a first path, the first path including a multicast fabric;

means for temporarily disabling the first switching module from transmitting data units for the flow;

means for transitioning the flow from the first switching module to the second switching module to a second path, the second path including a unicast fabric; and

means for transmitting a second data unit for the flow from the first switching module to the second switching module on the second path;

wherein the means for transmitting a first data unit transmits the data units for the flow on the first path before the flow is transitioned from the first path to the second path

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and wherein the means for transmitting a second data unit transmits the data units for the flow on the second path after the flow has been transitioned from the first path to the second path, and wherein the means for transitioning the flow transitions the flow from the multicast fabric to the unicast fabric after an address of a network device that provides the flow undergoes source learning.

10. (Original) The path transitioning data switch of claim 9 wherein the first switching module includes the means for transmitting a first data unit and the means for transmitting a second data unit.

11. (canceled)

12. (canceled)

13. (currently amended) The path transitioning data switch of claim ~~12~~ 9 wherein the first switching module is coupled to the network device that provides the flow, and the means for temporarily disabling the first switching module prevents the first switching module from transmitting the flow from the network device to the backplane while the address of the network device is undergoing source learning.

14. (currently amended) A path transitioning data switch of claim ~~12~~ 9 wherein the first switching module is coupled to the network device that provides the flow, and the means for temporarily disabling the first switching module prevents the first switching module from transmitting the flow from the network device to the backplane for an interval to ensure that all data units of the flow have cleared the multicast fabric.

15. (Original) The path transitioning data switch of claim 14 wherein said interval is predetermined.

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16. (Original) The path transitioning data switch of claim 13 wherein the means for temporarily disabling the first switching module includes means for discarding data units and means for instructing the means for discarding data units to discard the data units for the flow.

17. (Original) The path transitioning data switch of claim 16 wherein the means for temporarily disabling the first switching module further includes means for instructing the means for discarding data units to stop discarding the data units for the flow.

18. (Original) The path transitioning data switch of claim 14 wherein the means for transmitting a second data unit transmits the second data unit on the unicast fabric after the source learning has been completed.

19. (Original) A path transitioning data switch having a plurality of switching modules and a backplane interconnecting the switching modules, the data switch comprising:

means for transmitting a first data unit having a first address as a destination address over the backplane;

means for transmitting a second data unit having the first address as a source address over the backplane; and

means in response to the second data unit for temporarily disabling transmission over the backplane of data units having the first address as a destination address.

20. (Original) A path transitioning data switch of claim 19 wherein the first address is associated with a network device coupled to a first switching module, and the data switch performs source learning of the first address after receiving the second data unit from the network device.

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21. (Original) A path transitioning data switch of claim 20 wherein the means for temporarily disabling transmission prevents transmission of the data units having the first address as the destination address while the first address undergoes source learning.

22. (Original) The path transitioning data switch of claim 21 wherein the means for temporarily disabling transmission includes means for discarding data units and means for instructing the means for discarding data units to discard the data units having the first address as the destination address.

23. (Original) The path transitioning data switch of claim 22 wherein the means for temporarily disabling transmission further includes means for instructing the means for discarding data units to stop discarding the data units having the first address as the destination address.

24. (Original) A path transitioning data switch of claim 20 wherein the means for temporarily disabling transmission prevents transmission of the data units from the network device to the backplane for an interval to ensure that all data units having the first address as the destination address have cleared the backplane.

25. (Original) The path transitioning data switch of claim 24 wherein said interval is predetermined.

26. (Original) A method of flow path transitioning in a data communication switch having a plurality of flow paths and a plurality of network interface modules, the method comprising the steps of:

receiving a first packet having an unknown source address from a source device coupled to a first network interface module;

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transmitting the first packet over a first flow path to one or more network interface modules; and

performing source learning of the source address,

wherein the first network interface module is

disabled from transmitting packets from the source device to other network interface modules while source learning of the source address is being performed.

27. (Original) The method of flow path transitioning of claim 26 wherein other network devices are disabled from transmitting any packet having the source address undergoing source learning as a destination address over the flow paths until source learning has been completed.

28. (Original) The method of flow path transitioning of claim 26, the method further comprising the step of:

transmitting a second packet from the source device over a second flow path to a second network switching module after the source learning has been completed,

wherein the first flow path includes a multicast fabric and the second flow path includes a unicast fabric.

Claims 29-37 (canceled)